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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,823	09/03/2003	Toshihiro Takeuchi	SHM-14986	4117
40854	7590	11/20/2006	EXAMINER	
RANKIN, HILL, PORTER & CLARK LLP 4080 ERIE STREET WILLOUGHBY, OH 44094-7836			AMIRI, NAHID	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/653,823	TAKEUCHI, TOSHIHIRO	
	Examiner	Art Unit	
	Nahid Amiri	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 5-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/17/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

In view of Applicant's Amendment received 28 August 2006, amendments to the claims have been entered. Claims 1-14 are pending.

Claims 5 and 6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 28 August 2006.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

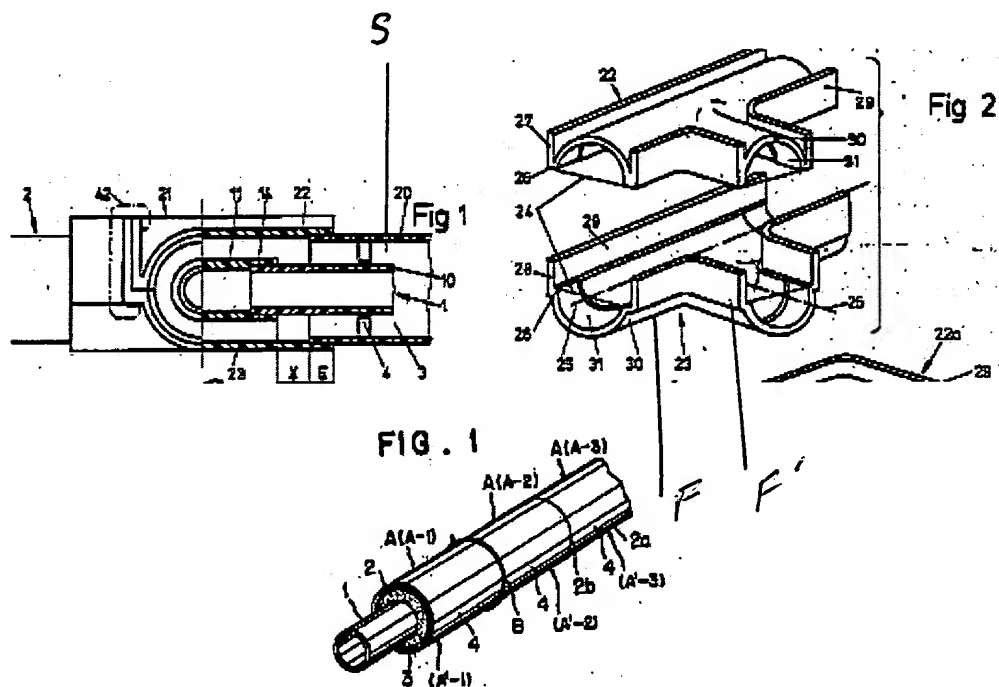
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,925,218 Kunz et al. in view of US Patent No. 4,287,245 Kikuchi.

With respect to claim 1, At the outset, it should be noted that patentability in a product-by process claim is based on the resultant structure of the product and not the recited process steps. Kunz et al. disclose a joint frame joint structure (23, Figs. 1-2) comprising a first frame member (F) of U-shaped cross section having a first sidewall, a second sidewall, a bottom wall and an opening (29); a second frame member (F', see attachment), similar to the first frame member, of

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U-shaped cross section having an opening (29), said second frame member (F') having an end portion connected to at least one of the first sidewall and the second sidewall of the first frame member (F); a reinforcing member (constituted by the pipe 10) extending into the first frame member (F) and the second frame member (F') by predetermined lengths at a joint of the first frame member (F) and the second frame member (F'); a plate member (22) closing the openings (29) of the first and second frame members (F, F') to form closed cross sections. Kunz et al. does not disclose a foamed resin filling spaces defined by the plate member, the first and second frame member and the reinforcing member. Kikuchi teaches (Fig. 1) a foamed resin (2) placed in a space between the pipe (1) and metal plate (4). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide a foamed resin as taught by Kikuchi in spaces (S) defined by the plate member (22) the first and second frame members (F, F') and the reinforcing member (10) of Kunz et al.'s invention in order to insulate the pipe against the heat. With respect to the added process recitation pertaining to how the foamed resin is formed, the resultant combination possesses a "foamed resin" and that is all that is necessary to meet the claim.



With respect to claim 2, Kunz et al. disclose (Figs. 1-2, column 2, lines 8-10) that the reinforcing member (10) is generally T-shaped.

With respect to claim 3, Kunz et al. disclose (Fig. 3, column 2, lines 60-61) that the reinforcing member (10) is generally L-shaped.

With respect to claims 7 and 12, Kunz et al. disclose the claimed invention except for the plate member is generally planar. There is no criticality is associated with the shaped of the plate member. It would have been an obvious matter of design choice to have the plate member of Kunz et al. as a planar member in order to attached it to planar surface.

With respect to claim 11, Kunz et al. disclose (Fig. 2) the second frame member (F') having an end portion connected to one of the first and second sidewalls of the first frame member (10), and wherein the one of the first and second sidewalls of the first frame member (F) has a hole formed therein; and wherein the hole is larger than a cross-sectional dimension o the reinforcing member (10) of the reinforcing member such that the reinforcing member (10) may freely extend through the hole in the first frame member (F). kunz et al. do not disclose that a space surrounding the reinforcing member (10) and the one of the first and second side walls of the first frame member (F) at the hole being filled with the foamed resin. Kikuchi teaches (Fig. 1) a foamed resin (2) placed in a space between the pipe (1) and metal plate (4). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide a foamed resin as taught by Kikuchi in spaces (S) defined by the plate member (22) the first and second frame members (F, F') and the reinforcing member (10) of Kunz et al.'s invention in order to insulate the pipe against the heat. With respect to the added process recitation pertaining to how the foamed resin is formed, the resultant combination possesses a "foamed resin" and that is all that is necessary to meet the claim.

Claims 4, 8-10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunz et al. and Kikuchi as applied to claims 1-3, 7, 11, and 12 above, and further in view of US Patent No. 3,948,247 Heilemann.

With respect to claims 4, 8-10, 13, and 14, Kunz et al. suggest (Fig. 5) that the plate member (22), the first and second frame members, and reinforcing member (10) may be made of metal in view of the illustration of metal cross-hatching. Kunz et al. does not disclose that the plate member and the first and second frame members are made from a first metal material which is different from a second metal material of the reinforcing member and are affixed to one another by welding. Heilemann teaches a device (column 5, lines 13-16) having a combination of an aluminum plate with a copper pipe, i.e., two different metal materials. It would have been an obvious matter of design choice to one of ordinary skill in the art to provide Kunz with the first, second frame members and the plate member from first metal member which affixed them to one another by welding and the reinforcing member from a second metal member which is different from first metal member as taught by Heilemann so as to provide chemically compatible materials to minimize corrosion.

Response to Arguments

Applicant's arguments filed 28 August 2006 have been fully considered but they are not persuasive.

Applicant argues with respect to claims 1-3, that Kunz et al. '218 disclose a double walled pipeline system with two half shells are glue together which are concentrically assembled as an outer layer to a pipe which device prevent the escape of fluids if the pipe develop a leak and does not relate to a vehicle frame structure. This is not found to be persuasive because a vehicle is not being claimed and there is nothing in the claims defining what type of "vehicle" is being referred to. Note that a "vehicle" is merely a carrier" in the broad sense. The structure of Kunz et al. constitutes frame joint structure for a "vehicle", which vehicle is the pipe line. It would appear that applicant is relying on some other source to impact to the claims limitations otherwise not recited therein. This reliance is insufficient.

Applicant further alleges that Kunz et al. fails to teach or suggest the foamed resin. However, it should be noted that Kikuchi has been relied upon to teach this feature. One cannot establish non-obviousness by attacking references indirectly when a rejection is based on

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incorporation of the features from one reference to the other. Following the teaching of Kikuchi, it is readily apparent that one of ordinary skill would fill all of the spaces in Kunz et al. in order to achieve the proper insulation.

Particularly, Applicant fails to point out what makes new claims 7-14 patentable over prior art. Therefore, they stand or fall with claims 1.

Conclusion


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action, e.g. claim 1, lines 14-16, the limitation of "wherein the foamed resin results from foaming an unfoamed resin applied uniformly onto at least upper lower surfaces of the reinforcing member" was not claimed in original claimed invention. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Nahid Amiri
Examiner
Art Unit 3679
October 30, 2006



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